Commonwealth of Kentucky Division for Air Quality

PERMIT STATEMENT OF BASIS

CONDITIONAL MAJOR RENEWAL DRAFT NO. F-06-0021 INOAC PACKAGING GROUP BARDSTOWN, KY May 8, 2006

ELAHE HOUSHMAND, REVIEWER

SOURCE I.D. #: 21-179-00040

SOURCE A.I. #: 3258

ACTIVITY #: APE20050004

SOURCE DESCRIPTION:

Inoac Packaging Group operates a plastic cosmetic bottles production facility (primary SIC code 3085). The source produces plastic cosmetic bottles from plastic resins using an injection blow molding process. The source uses the injection blow molding machines to process plastic resins to produce the bottles. Silkscreen printing, hot stamping, and the spray coating processes are used to coat the bottles.

Renewal Permit:

The source has submitted an application for renewal of its current Title V permit as a Conditional Major permit. The facility has requested that enforceable limits be placed on their actual VOC and HAP emissions so that the company can be considered a conditional major source. The HAP limits are also to preclude the source from applicability of 40 CFR 63, Subpart PPPP.

The source currently operates six (6) mini-frosters. The two (2) mini-frosters, identified as EP09 and EP10 scheduled for installation in 2004 were not installed. The source would have to submit a new application for the addition of these facilities.

Upon approval of this permit, F-06-021, the source consists of the following permitted emission units and pollution control devices:

- (a) Four (4) mini-frosters, identified as EP6 and constructed in 2000, each with a maximum capacity of 0.4383 gallon coating per hour. Booths are equipped with cartridge filters to control particulate matter emissions.
- (b) Two (2) mini-frosters, identified as EP7-EP8 and constructed in 2002, each with a maximum capacity of 0.4383 gallon coating per hour. Booths are equipped with cartridge filters to control particulate matter emissions.
- (c) Two (2) mini-frosters, identified as EP11-EP12 and projected for construction on December 2006, each with a maximum capacity of 0.4383 gallon coating per hour. Booths are equipped with cartridge filters to control particulate matter emissions.
- (d) Several Insignificant Activities as listed in SECTION C of the permit.

NOTE: Three (3) silkscreen operations and one (1) boiler have been removed from the source.

Existing Approvals:

- 1. *Title V Permit No. V-00-005, issued on January 5, 2000 (Log number G410)*The initial this approval for source specified terms and conditions for the operation of the plastic cosmetic bottles production and surface coating source. It authorized the operation of Group #2 (Paint Spray Booth #24) and Group #6 (four Mini- Frosters).
- 2. On February 26, 2001, Inoac Packaging Group sent a letter to inform DAQ that Group #2 (Paint Spray Booth #24) had been removed from their premises.
- 3. On July 8, 2003 (Log number 54386) Significant Permit Revision No. V-00-005 Revision 1, was issued. It authorized the construction and operation of six additional mini-froster presses, EP07-EP12. The source was approved for phased-construction of these mini-froster presses. An emissions cap of 9.0 TPY for a single HAP and 22.5 TPY for total HAPs was established for the construction of the six mini-froster presses, such that the requirements of case-by-case MACT were not applicable.

Applicable Regulations:

Pursuant to 401 KAR 59:010, Section 1, the requirements of this rule apply to each affected facility, associated with a process operation, which is not subject to another emission standard with respect to particulates in 401 KAR Chapter 59, commenced on or after July 2, 1975.

Pursuant to 401 KAR 63:020, Section 1, the requirements of this rule are applicable to each affected facility which emits or may emit potentially hazardous matter or toxic substances as defined in 401 KAR 63:020, Section 2 (2), provided such emissions are not elsewhere subject to the provisions of the Kentucky administrative regulations.

Emission and Operating Caps Description:

401 KAR 59:010, New process operations, Section 3

- 1. Visible emissions shall not equal or exceed 20% opacity for each applicable process.
- 2. Particulate matter emissions shall not exceed 2.34 pounds/hour for each applicable process.

To be in compliance, the booths will be required to use filters and be operated and maintained in accordance with manufacturer's recommendations.

401 KAR 63:020, Section 3

The permittee shall not allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants.

The source is in compliance with 401 KAR 63:020. This compliance determination is based on the emission rates of toxics given in the application submitted by the source. If the source alters process rates, material formulations, or any other factor that would result in an increase of toxics emissions or the addition of toxics emissions not previously evaluated by the Division, the source shall submit the appropriate application forms pursuant to 401 KAR 52:030, Section 3(1)(a), along with modeling

to show that the facility will remain in compliance with 401 KAR 63:020.

Conditional Major

VOC emissions shall not exceed 90 tons during any consecutive twelve (12) month period. Monthly records to demonstrate compliance with this limitation shall be maintained, and total VOC emissions shall be reported semiannually.

Conditional Major & 40 CFR 63, Subpart PPPP

To preclude the applicability of 40 CFR 63, Subpart PPPP, during any consecutive twelve (12) month period the permittee has opted for a plant-wide single HAP and combined HAP limit of 9 TPY and 22.5 TPY, respectively. Monthly records, which demonstrate compliance with these limitations, shall be maintained and total shall be reported semiannually.

Type of control and efficiency:

Spray booths are equipped with cartridge filters to control particulate emissions. The particulate control efficiency for the filters was assumed to be 97%. There are no controls for VOC and HAP emissions currently present at the source. The spray coating is assumed to have 50% transfer efficiency.

Emission factors and their source:

Potential to emit calculations for the mini-froster presses are based on material balance and material safety data sheets provided by the source.

All VOCs and organic HAPs contained in the materials used are assumed to emit into the atmosphere.

Periodic Monitoring:

- (a) Given the control devices used (filters) at the booths, there is little chance of violating a mass or opacity standard. For this reason, direct measurements of mass and opacity emissions will not be required but some assurance that the filters are working properly will be needed. Visual inspection of the filters each day painting is done and proper maintenance are sufficient to assure that the filters are working properly.
- (b) The permittee shall monitor the VOC and HAP usage for the mini-frosters on a monthly and rolling 12-month basis.

Credible Evidence:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.